

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

~~1-33~~ (Cancelled).

- 20 ~~34~~. (New) An isolated polypeptide comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) having from 0 to 5 amino acid residues that are added, deleted or conservatively substituted. ²⁰
- 21 ~~35~~. (New) The polypeptide of Claim ~~34~~ comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that added. ²⁰
- 22 ~~36~~. (New) The polypeptide of Claim ~~34~~ comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that are deleted. ²⁰
- 23 ~~37~~. (New) The polypeptide of Claim ~~34~~ comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that are conservatively substituted. ²⁰
- 24 ~~38~~. (New) The polypeptide of Claim ~~34~~ comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6). ²⁰
- 25 ~~39~~. (New) An isolated polypeptide comprising an extracellular region of the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6). ²⁵
- 26 ~~40~~. (New) The polypeptide of Claim ~~39~~, wherein the extracellular region comprises at least 10 contiguous residues. ²⁵
- 27 ~~41~~. (New) The polypeptide of Claim ~~39~~, wherein the extracellular region comprises the N-terminal fragment. ²⁵
- 28 ~~42~~. (New) The polypeptide of Claim ~~41~~, wherein the N-terminal extracellular region comprises at least 10 contiguous residues. ²⁷
- 29 ~~43~~. (New) A composition comprising the polypeptide of Claim ~~34~~ and a pharmaceutically acceptable carrier. ²⁰
- 30 ~~44~~. (New) A composition comprising the polypeptide of Claim ~~39~~ and a pharmaceutically acceptable carrier. ²⁵

- 31 ~~45~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~34~~. ²⁰
- 32 ~~46~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~35~~. ²¹
- 33 ~~47~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~36~~. ²²
- 34 ~~48~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~37~~. ²³
- 35 ~~49~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~38~~. ²⁴
- 36 ~~50~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~39~~. ²⁵
- 37 ~~51~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~40~~. ²⁶
- 38 ~~52~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~41~~. ²⁷
- 39 ~~53~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim ~~42~~. ²⁸
- 40 ~~54~~. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) having from 0 to 5 amino acid residues that are added, deleted or conservatively substituted.
- 41 ~~55~~. (New) The nucleic acid molecule of Claim ~~54~~ operably linked to a promoter.
~~Support at page 12, lines 17-26.~~ ⁴⁰
- 42 ~~56~~. (New) An expression vector comprising the nucleic acid molecule of Claim ~~55~~ operably linked to control sequences recognized by a host cell transformed with the vector. ⁴¹
- 43 ~~57~~. (New) A host cell transformed with the vector of Claim ~~56~~. ⁴²
- 44 ~~58~~. (New) A method of using the nucleic acid of Claim ~~54~~, comprising culturing a host cell that has been transformed with a vector comprising the nucleic acid molecule operably linked to control sequences recognized by the host cell under conditions that allow expression of the polypeptide. ⁴⁰

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45 ~~59.~~ (New) The method of Claim ~~58~~ further comprising recovering the polypeptide from the host cell.

46 ~~60.~~ (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding at least 10 contiguous amino acid residues from an extracellular domain of the PF4AR polypeptide of Figure 5 (SEQ ID NO:6).

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47 ~~61.~~ (New) The nucleic acid molecule of Claim ~~60~~, wherein the encoded polypeptide is an N-terminal extracellular domain.

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48 ~~62.~~ (New) The nucleic acid molecule of Claim ~~60~~ operably linked to a promoter.

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49 ~~63.~~ (New) An expression vector comprising the nucleic acid molecule of Claim ~~63~~ operably linked to control sequences recognized by a host cell transformed with the vector.

⁴⁹
50 ~~64.~~ (New) A host cell transformed with the vector of Claim ~~63~~.

⁴⁶
51 ~~65.~~ (New) A method of using the nucleic acid of Claim ~~60~~, comprising culturing a host cell that has been transformed with a vector comprising the nucleic acid molecule operably linked to control sequences recognized by the host cell under conditions that allow expression of the polypeptide.

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52 ~~66.~~ (New) The method of Claim ~~65~~ further comprising recovering the polypeptide from the host cell.

53 ~~67.~~ (New) A method for determining the presence or absence of a PF4AR nucleic acid in a sample, comprising the steps of:

- (a) selecting a probe comprising at least 20 contiguous nucleotides from the nucleic acid sequence of Figure 5 (SEQ ID NO:5);
- (b) hybridizing the probe to any PF4AR nucleic acid present in the sample to form a probe/PF4AR nucleic acid complex;
- (c) detecting the presence or absence of the probe/PF4AR nucleic acid complex in the sample, and
- (d) determining the presence or absence of PF4AR nucleic acid in the sample based on the result of step (c).

54 ~~68.~~ (New) A method of amplifying a PF4AR nucleic acid in sample, comprising the steps of:

- (a) selecting an oligonucleotide primer having a 3' terminus consisting of at least 20 contiguous nucleotides selected from the nucleic acid sequence of Figure 5 (SEQ ID NO:5) or at least 20 contiguous nucleotides complementary to said primer;
- (b) hybridizing the oligonucleotide primer to a single strand of the PF4AR

nucleic acid in the sample, and

(c) performing a nucleic acid polymerase reaction wherein the hybridized oligonucleotide primer primes the synthesis of a second strand complementary to the single stranded nucleic acid to form an amplified nucleic acid.

- 55 ~~69~~. (New) An antibody capable of binding to the PF4AR polypeptide of Figure 5 (SEQ ID NO:6) and that does not cross-react with other PF4AR polypeptides.
- 56 ~~70~~. (New) The antibody of Claim ~~67~~⁵³, which is a polyclonal antibody.
- 57 ~~71~~. (New) The antibody of Claim ~~67~~⁵³, which is a monoclonal antibody.
- 58 ~~72~~. (New) The antibody of Claim ~~67~~⁵³, which is an IgG1 isotype antibody.
- 59 ~~73~~. (New) An antibody capable of binding an extracellular region of the PF4AR polypeptide of Figure 5 (SEQ ID NO:6).
- 60 ~~74~~. (New) The antibody of Claim ~~73~~⁵⁹, wherein the extracellular region is an N-terminal extracellular region.
- 61 ~~75~~. (New) The antibody of Claim ~~73~~⁵⁹, wherein the extracellular region comprises at least 10 contiguous amino acid residues of Figure 5 (SEQ ID NO:6).
- 62 ~~76~~. (New) The antibody of Claim ~~73~~⁵⁹, which is a polyclonal antibody.
- 63 ~~77~~. (New) The antibody of Claim ~~73~~⁵⁹, which is a monoclonal antibody.
- 64 ~~78~~. (New) The antibody of Claim ~~73~~⁵⁹, which is an IgG1 isotype antibody.
- 65 ~~79~~. (New) The antibody of Claim ~~74~~⁶⁰, which is a monoclonal antibody.
- 66 ~~80~~. (New) The antibody of Claim ~~74~~⁶⁰, which is an IgG1 isotype antibody.
- 67 ~~81~~. (New) The antibody of Claim ~~75~~⁶¹, which is a monoclonal antibody.
- 68 ~~82~~. (New) The antibody of Claim ~~75~~⁶¹, which is an IgG1 isotype antibody.
- 69 ~~83~~. (New) A composition comprising the antibody of Claim ~~69~~⁵⁵ and a pharmaceutically acceptable carrier.
- 70 ~~84~~. (New) A composition comprising the antibody of Claim ~~73~~⁵⁹ and a pharmaceutically acceptable carrier.
- 71 ~~85~~. (New) A composition comprising the antibody of Claim ~~77~~⁶³ and a pharmaceutically acceptable carrier.

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72 ~~86~~. (New) A composition comprising the antibody of Claim ~~79~~ and a
pharmaceutically acceptable carrier.

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73 ~~87~~. (New) A composition comprising the antibody of Claim ~~81~~ and a
pharmaceutically acceptable carrier.